GUIDE SPECIFICATIONS
BLADE PROCESSING SERVER COMPUTER SYSTEM
8-10-2009

- 10 BLADES W/ DUAL QUAD-CORE CPUS AND 32 GB MEMORY EACH

- SPECIFICATIONS FOR 1 OF 10 BLADES ("HEAD NODE")
  - TWO CPUS, EACH A LOW POWER 64-BIT QUAD-CORE, ≥ 3.4 GHZ, ≥ 12 M L2 CACHE
  - 32 GB DDR2 800 MHz ECC MEMORY, FULLY BUFFERED (4GB MEMORY PER CORE)
  - HEAT MANAGMENT AS NEEDED
  - SIX 300 GB 10K RPM SAS HARD DRIVES

- SPECIFICATIONS FOR 9 OF 10 BLADES
  - TWO CPUS PER BLADE, EACH A LOW POWER 64-BIT QUAD-CORE, ≥ 3.4 GHZ, ≥ 12 M L2 CACHE
  - 32 GB DDR2 800 MHz ECC MEMORY, FULLY BUFFERED (4GB MEMORY PER CORE)
  - HEAT MANAGMENT AS NEEDED
  - ONE ≥ 150 GB 10 K RPM SAS HARD DRIVE

- OTHER OVERALL SPECIFICATIONS
  - 7U ENCLOSURE TO HOUSE ALL 10 HOT-PLUG BLADES
  - N+1 REDUNDANT 2000 W POWER SUPPLY MODULES AS NEEDED AT 200 V, L6-30 CONNECTORS
  - GIGABIT LAN ETHERNET LAN FOR BETWEEN BLADES AND CONNECTION TO EXTERNAL NETWORK
  - DVD-ROM DRIVE
  - ADDITIONAL COMPONENTS AND PARTS TO COMPLETE SYSTEM DETERMINED NECESSARY BY VENDOR
  - 3 YEAR PARTS CROSS SHIP WARRANTY
  - ASSEMBLY, TESTING, BURN-IN
  - LINUX OS - CLUSTERCORP ROCKS+ TO BE PURCHASED SEPARATELY BY CUSTOMER AND INSTALLED ON-SITE

4500285832

STATEMENT OF WORK FORMAT

BLADE PROCESSING SERVER COMPUTER SYSTEM
8-10-2009

PR: _____

Note: Only use the sections that are applicable to your procurement.

Background

- The present statement of work is for the requisition of a medium-sized "Blade Server" computer system that wil be used to run high-intensity scientific data processing of multiple, simultaneous, but independent software instances on a large number of compute nodes. Overall, processing performance is the primary objective. Reliability is also of concern. Multi-threaded code may be used on this machine. The attached sepcifications detail requirements further. Specifications are intended as a guide.

Objectives

- Each compute node will have dual quad-core processors, separate storage for the OS, and memory to support processing tasks. The system will be run in an "Embarassingly Parallel" configuration - truly parallel computing will not be done on this system. Extremely fast interprocessor communication (e.g. Infiniband) is not necessary. Gigabit ethernet inter-connection among all nodes and LAN will suffice. Output will be stored locally on the head blade where data storage is to belocated. The remainder of the blades need only HD storage for OS and scratch space.

Scope

- Vendor shall provide a design of the Blade Server using components that meet the requiremnts listed in the specifications, as well as other components as needed, but not specified. Upon approval of design, system the system shall be assembled, shall undergo burn-in, and shall be tested at the vendor site. The system shall be delivered to the specified government site and telephone support shall be available for initial set up of the system. Warranty and 3 year cross-ship parts support shall be provided.

Tasks or Requirements

- N/A

Deliverables or Delivery Schedule

The Blade Server is the primary deliverable. Documentation for operation and servicing of the system shall also be provided. The design shall be completed within 30 days of the intitiation of the order. Activities specified above under

"Scope", leading up to and including delivery, shall take place as soon as possible thereafter.Design, assembly, burn-in, and testing shall all be performed at the vendor site prior to delivery. Parts covered under warranty shall be shipped to the government site under a cross-ship agreement.

Government-Furnished Equipment and Government-Furnished Information

- N/A

Security

- No specific security measures are required for this acquisition.

Place of Performance

- Design, assembly, burn-in, and testing shall all be performed at the vendor site prior to delivery. Parts covered under warranty shall be shipped to the government site under a cross-ship agreement.

Period of Performance

- N/A